

# Introduction to biological clean safety cabinet



Model: SX-BHC-series

The SX-BHC series biological clean safety cabinets are designed for use in biosafety laboratories and other environments to provide biological safety isolation. These cabinets protect personnel, samples, and the environment, suitable for handling pathogens with risk levels 1, 2, and 3.

The SX-BHC series is a Class II clean safety cabinet. The negative pressure airflow in the front opening area protects personnel, while the vertical airflow through high-efficiency HEPA filters ensures the safety of samples. The exhaust airflow is also filtered through high-efficiency HEPA filters to prevent environmental contamination.

Our company specializes in the design, research, development, manufacturing, installation, and operation of purification equipment, testing instruments, and purification projects.

The SX-BHC series biological clean safety cabinet is designed and produced in strict accordance with the standards of NSF-49 and JG170-2005. In addition to the usual floating layer analysis and particle counting method, the microbial method is also used to evaluate the performance of the clean safety cabinet.



## merit

- 1. The 10° tilt Angle design in line with the principle of ergonomics provides better operation feeling;
- 2. The shell is made of high quality cold rolled steel plate, electrostatic spraying; the three sides of the safe cabinet operation area are made of stainless steel (SUS304) integrated structure, and the interior is 8mm large round corner treatment for easy cleaning;
- 3. Vertical laminar negative pressure model, return air 30%/100% filtration discharge;
- 4. Unique internal cavity safety negative pressure design, air curtain isolation, ensure no leakage under normal use, to ensure the safety of operators;
- 5. The bracket type safety cabinet can be separated from the upper box, which is convenient for handling and positioning;
- 6. The exhaust air has special high efficiency filter to ensure that the discharged air meets the national standard requirements;
- 7. Integrated sliding safety door, can be positioned at will, easy to operate, and can be completely closed for sterilization;
- 8. Equipped with filter failure alarm, blower overload alarm and working window opening limit alarm system.

## function

- The average wind speed of the descending air flow is 0.25-0.45m/s
- Illuminance:  $\geq 650\text{LUX}$
- noise :  $\leq 67\text{dB}$
- Cleanliness: 100 grade
- Amplitude:  $\leq 5\mu\text{m (rms)}$
- Ultraviolet intensity: 400mW/m<sup>2</sup>
- Power supply: 50Hz, 220V
- Refer to NSF-49 and EN EN12469-2000, JJF1815-2020 standards

## apply

- Biosecurity isolation equipment for use in biosafety laboratories and other laboratories
- Used to protect people, test samples and the environment
- It is widely used in microbiology, biomedicine, genetic engineering, biological products and other fields of scientific research, teaching, clinical testing and production
- This product is not a medical device and is for scientific research only

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parameter

model	SX-BHC-1000A2 ,SX-BHC-1300A2, SX-BHC-1000B2, SX-BHC-1300B2
Cleanliness level	ISO5 (Class 100) / ISO4 (Class 10)
Filter level/filter efficiency	HEPA: $\geq 99.995\%$ , @0.3 $\mu\text{m}$ /ULPA: $\geq 99.999\%$ ,@0.12 $\mu\text{m}$
Downstream air average flow rate (m/s)	0.25~0.45m/s
Average inflow velocity (m/s)	$\geq 0.5\text{m/s}$
Noise	$\leq 67\text{dB(A)}$
Peak vibration	$\leq 5\mu\text{m}$
Source	AC single phase 220V/50Hz
Air flow balance biological protection	Personnel protection 1-8CFU/ml (repeat 3 times, 5min/ time)
	A. Total number of bacterial colonies in impact sampler: less than or equal to 10CFU/ time
	b. Total number of bacterial colonies in slit sampler: less than or equal to 5CFU/ time
	Product protection 1-8CFU/ml (repetitive 3 times, 5min/ time)
	Total number of bacterial colonies: less than or equal to 5CFU/ time
	Cross-contamination protection 1-8CFU/ml (repetitive 3 times, 5min/ time)
	total number of colonies: less than or equal to 2CFU/time

model	SX-BHC-1000A2 SX-BHC-1000B2	SX-BHC-1300A2 SX-BHC-1300B2	SX-BHC-1600A2 SX-BHC-1600B2
Outline dimension (mm)	1160X760X2150	1460X760X2150	1760X760X2150
Work area size (mm)	1000X600X640	1300X600X640	1600X600X640

